

47259500.txt
SEQUENCE LISTING

<110> OKUNO, KAZUAKI
YABUTA, MASAYUKI

<120> POLYPEPTIDE CLEAVAGE METHOD USING OMPT PROTEASE VARIANT

<130> 47259-5001-00-US (223490)

<140> 10/573,821
<141> 2006-03-28

<150> PCT/JP04/014704
<151> 2004-09-29

<150> JP 2003-342183
<151> 2003-09-30

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<170> PatentIn version 3.5

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35 40 45
Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
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Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
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Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
85 90 95
Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
100 105 110
Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
115 120 125

Met His Gly Tyr Asp Ala Glu Leu Arg Leu Tyr Arg Arg His His Gly
 130 135 140

Ser Gly Ser Pro Tyr Arg His Pro Arg His Ala Glu Gly Thr Phe Thr
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 35 40 45

Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
 50 55 60

Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
 65 70 75 80

Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
 85 90 95

Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
 100 105 110

Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
 115 120 125

Met His Ala Ala Ala Ala Ala Ala Ala Ala Ala Arg Arg Ala Ala Ala
 130 135 140

Ala Gly Ser Pro Tyr Arg His Pro Arg His Ala Glu Gly Thr Phe Thr
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 35 40 45

Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
 50 55 60

Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
 65 70 75 80

Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
 85 90 95

Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
 100 105 110

Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
 115 120 125

Met His Ala Ala Ala Ala Ala Ala Ala Ala Ala Arg Arg Ala Arg Ala
 130 135 140

Ala Gly Ser Pro Tyr Arg His Pro Arg His Ala Glu Gly Thr Phe Thr
 145 150 155 160

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<213> Artificial Sequence

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 35 40 45
 Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
 50 55 60
 Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
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 Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
 85 90 95
 Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
 100 105 110
 Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
 115 120 125
 Met His Gly Tyr Asp Ala Glu Leu Arg Leu Tyr Arg Phe Val Pro Ile
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 Gly Gln

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 35 40 45
 Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
 50 55 60
 Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
 65 70 75 80
 Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
 85 90 95
 Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
 100 105 110
 Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
 115 120 125
 Met His Ala Ala Ala Ala Ala Ala Ala Ala Arg Arg Arg Ala Arg Phe
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 35 40 45

Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
 50 55 60

Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
 65 70 75 80

Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
 85 90 95

Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
 100 105 110

Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
 115 120 125

Met His Ala Ala Ala Ala Ala Ala Ala Ala Arg Arg Arg Ala Arg Ser
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Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr Asp Arg Pro
 35 40 45

Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe
 50 55 60

Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Asp Leu Pro Glu Ala
65 70 75 80

Asp Thr Val Val Val Pro Asp Ser Ser Asn Trp Gln Met His Gly Tyr
85 90 95

Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro
100 105 110

Pro Phe Val Pro Thr Glu Pro His His His His Pro Gly Gly Arg Gln
115 120 125

Met His Ala Ala Ala Ala Ala Ala Ala Arg Arg Arg Ala Arg Cys
130 135 140

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<400> 19
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<212> PRT

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<211> 15

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<210> 34
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Arg Asn Lys Gly Gln
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 <211> 37
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Val Pro Ile Phe Thr Tyr Gly Glu Leu Gln Arg Met Gln Glu Lys Glu
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 35 40 45

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Lys Phe Asn Asn Ala Ala Ile Ile Lys Gly Ala Ile Asn Trp Asp Leu
 65 70 75 80

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 85 90 95

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 100 105 110

Gly Thr Trp Thr Asp Glu Ser Arg His Pro Asp Thr Gln Leu Asn Tyr
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120

125

Ala Asn Glu Phe Asp Leu Asn Ile Lys Gly Trp Leu Leu Asn Glu Pro
 130 135 140

Asn Tyr Arg Leu Gly Leu Met Ala Gly Tyr Gln Glu Ser Arg Tyr Ser
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<213> Escherichia coli

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 225 230 235 240
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 245 250 255
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 260 265 270
 Ser Asp Tyr Ser Lys Asn Gly Ala Gly Ile Glu Asn Tyr Asn Phe Ile
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Thr Thr Ala Gly Leu Lys Tyr Thr Phe
290 295